IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims in accordance with the following:

1. (CURRENTLY AMENDED) A numerical controller for controlling a machine according to a machining program, comprising:

a storage device or medium storing input/output units each including program block data obtained by dividing the machining program ~~among~~ so that divided portions of the machining program are stored in respective ones of the input/output units, each input/output unit ~~including~~ storing additional information associated with the program block data stored in the input/output unit, said additional information including an effective data length of the program block, front ~~input/output unit~~ link data designating an input/output unit immediately preceding each input/output unit in a sequence of the machining program, and rear ~~input/output unit~~ link data designating an input/output unit following each input/output unit in the sequence of the machining program;

a processor processing the input/output units to run the machining program; and

an interface inputting/outputting the input/output units between said storage device or medium and said processor.

2. (CURRENTLY AMENDED) A numerical controller according to claim 1, wherein said processor reads a first input/output unit including a program block corresponding to a beginning part of the machining program and successively reads input/output units stored in said storage device or medium according to rear ~~input/output unit~~ link data in the previously read input/output unit through said interface, and wherein said processor successively executes the program blocks included in the read input/output units.

3. (CURRENTLY AMENDED) A numerical controller according to claim 2, wherein when a branch instruction is included in the program block of the input/output unit when it is executed by said processor, said processor reads the input/output unit preceding the input/output unit being executed using the front ~~input/output unit~~ link data and reads the input/output unit

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following the input/output unit being executed using the rear ~~input/output unit~~ link data to search for a line designated by the branch instruction.

4. (PREVIOUSLY PRESENTED) A numerical controller according to claim 2, wherein said additional information further includes data specifying an input/output unit including a line designated by a branch instruction, and when the branch instruction is included in the program block of the input/output unit being executed, said processor reads the input/output unit specified by the data.

5. (ORIGINAL) A numerical controller according to claim 1, wherein said processor reads only an input/output unit or input/output units to be edited from said storage device or medium through said interface.

6. (ORIGINAL) A numerical controller according to claim 5, wherein said processor reads only an input/output unit to be edited and modifies a program block and an effective data length included in the read input/output unit.

7. (CURRENTLY AMENDED) A numerical controller according to claim 5, wherein said processor deletes an input/output unit by changing rear ~~input/output unit~~ link data of a preceding input/output unit designated by front ~~input/output unit~~ link data of the input/output unit to be deleted to rear ~~input/output unit~~ link data of the input/output unit to be deleted, and by changing front ~~input/output unit~~ link data of a succeeding input/output unit designated by rear ~~input/output~~ link data of the input/output unit to be deleted to the front ~~input/output~~ link data of the input/output unit to be deleted.

8. (CURRENTLY AMENDED) A numerical controller according to claim 5, wherein said processor adds a new input/output unit including program block data and additional information, changes rear ~~input/output unit~~ link data of a preceding input/output unit designated by front ~~input/output~~ link data of the input/output unit to be added to data specifying the input/output unit to be added, and changes front ~~input/output unit~~ link data of an input/output unit designated by the rear ~~input/output~~ link data of a succeeding input/output unit to be added to data specifying the input/output unit to be added.

9. (CURRENTLY AMENDED) A numerical controller for controlling a machine according to a machining program, comprising:

a storage device storing a plurality of input/output units, each of the input/output units ~~including~~ storing program data obtained by dividing the machining program so that divided portions of the machining program are stored in respective ones of the input/output units, each of the input/output units ~~including~~ storing additional information associated with the program data stored in the input/output units, the additional information including first ~~input/output unit~~ link data designating an input/output immediately preceding each input/output unit in a sequence of the machining program, and second ~~input/output unit~~ link data designating an input/output unit following each input/output unit in the sequence of the machining program; and

a processor processing the input/output units to run the divided portions of the machining program stored in the input/output units.

10. (CURRENTLY AMENDED) A numerical controller according to claim 9, wherein when a branch instruction is included in the program block of an input/output unit being executed by said processor, said processor reads the input/output unit preceding the input/output unit being executed using the first ~~input/output~~ link data, and reads the input/output unit following the input/output unit being executed using the second ~~input/output~~ link data.

11. (CURRENTLY AMENDED) A numerical controller according to claim 9, wherein said processor deletes an input/output unit by changing the second ~~input/output~~ link data of a preceding input/output unit designated by the first ~~input/output unit~~ link data of the input/output unit to be deleted to the second ~~input/output unit~~ link data of the input/output unit to be deleted, and by changing the first ~~input/output unit~~ link data of a following input/output unit designated by the second ~~input/output unit~~ link data of the input/output unit to be deleted to the first ~~input/output unit~~ link data of the input/output unit to be deleted.

12. (PREVIOUSLY PRESENTED) A numerical controller according to claim 9, wherein said processor adds a new input/output unit including program data and additional information, changes the second ~~input/output unit~~ link data of a preceding input/output unit designated by the first ~~input/output unit~~ link data of the input/output unit to be added to data specifying the input/output unit to be added, and changes the first ~~input/output unit~~ link data of an input/output unit designated by the second ~~input/output unit~~ link data of the succeeding input/output unit to be added to data specifying the input/output unit to be added.